

Consumer Perception of Attributes of Organic Food in Shah Alam, Malaysia

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Abstract

Organic food can be defined as agricultural food products that are free from genetically modified ingredients, chemical pesticides, or chemical additives. This study aimed to assess the influence of demographic profiles (gender, employment status, income status, marital status, and educational level) on consumers' perception of organic food. A total of 420 respondents participated in this study. Five factors were included to measure consumer perception, product characteristic, price, labelling and packaging, promotion, and accessibility of organic food. The findings of the study indicated that the demographic profiles influence consumers' perception of organic food. Gender was found to influence three factors of the study which were the product, labelling and packaging, and price. Consumers with higher education levels and monthly income had a more positive perception of product characteristics and price. Single consumers were more likely to purchase organic food which they believed was pesticides free and they had better trust in branded food. Employment status did not affect the consumers' perception of consuming organic food. This paper intensifies the perception of consumers in various factors (product, price, labelling and packaging, promotion, and place) towards organic food.

Keywords: consumer perceptions, GMO-free, organic food, pesticide-free

1.0 Introduction

Organic food is widely known as food that is produced using methods that comply with the standard of organic farming. Organic food is free from genetically modified ingredients, chemical pesticides, and synthetic fertilisers to keep it fresh for a much longer time than usual (Food Safety Quality Division, 2018). The organic food market is growing significantly globally and is expected to flourish steadily in the future with the increasing demands for healthier and safer food

products from consumers as well as their increased awareness of environmental conservation (Bazaluk et al., 2020; Crandall et al., 2011; Schifferstein & Ophuis, 1998). The public commonly sees conventional food production as posing various health threats due to the use of chemical pesticides and fertilisers that can bioaccumulate in human and animal bodies. Pesticides, such as organochlorines are frequently used in agricultural activities, are known for their long environmental half-life characteristics thus, increasing their risk of persisting in the environment and entering the food chain (Jayaraj et al., 2016).

Logo and product certifications play an important role in influencing consumer perception of organic food. Consumers often feel safer and more secure if a product is certified and has a trusted logo approved by the responsible authority. In Malaysia, the Malaysian Organic (myOrganic) certificate is developed by the Department of Agriculture Malaysia (DOA) through the Ministry of Agriculture based on the MS1529:2015; the plant-based organically produced foods-requirements for production, processing, handling, labelling, and marketing standards (Suhaimie et al., 2016). The goals of this standard are to protect both producers and consumers from fraud in the marketplace and false product claims, as well as to ensure all production, preparation, storage, transportation, and labelling processes are compatible with the established standard. Moreover, this certification helps in standardisation with international standards to ease the trade business of organic products. Having a specifically authorised logo displayed on organic products may increase consumers' trust in the validity of the products and provide a sense of assurance on the safety of the food.

Organic food is often associated with higher prices as compared to nonorganic products because of its high quality and the strict farming standards that are imposed on organic food producers (Shafie et al., 2012). Many consumers are willing to pay more because of the quality of the food produced and their interest in health and environmental issues (Shafie et al., 2012). Based on a study by Paul and Rana (2017), people living in countries such as the United States, China, Japan, and India are more likely to willingly spend more on organic food. However, despite its known benefits, organic food is not readily available in many stores in Malaysia. This may be due to the relatively low demand for organic food among Malaysians, hence the growth of local organic food production is still lacking, with 60 per cent of the current supply of organic food products are being imported from other countries (Dardak

et al., 2009; Somasundram et al., 2016). Increasing awareness of organic food will lead to the increasing demand for the products among the consumers in Malaysia.

Determining the consumer's perception of organic food will help in kick-starting the growth of local production of food products among producers and retailers. This study aims to assess the factors influencing consumers' behaviour in purchasing organic food based on the theory of planned behaviour (TPB) model in predicting the use intentions of organic food (Shafie and Rennie, 2012). It also investigates the relationship between demographic characteristics and the factors that influence consumers to purchase organic food. Consumers' knowledge and perceptions of organic food are also examined.

2.0 Literature Review

Consumers who purchase organic food are usually older, have high incomes, and are well educated. Many consumers who are aware of the issue regarding organic and conventional foods are mostly educated and come from well-off families (Dardak et al., 2009). Most studies have found similar results where most consumers' behaviour in consuming organic food is highly related to individuals with more education (Crandall et al., 2011; Dimitri & Greene, 2013) and income (Dardak et al., 2009; Quah & Tan, 2010; Sangkumchaliang & Huang, 2012; Dimitri & Greene, 2013). As mentioned by Shafie and Rennie (2012), age, income, and education play important roles and have positive relationships with consumers purchasing organic food. This notion is supported by Sangkumchaliang and Huang (2012), where most organic consumers are those of older age (average age of 36 years old) and degree holders. The limited knowledge of organic food and low source of income may decrease consumers' intention to purchase organic products. Women are more likely to have preferences compared to men since they usually do the grocery shopping for their household (Dardak et al., 2009). Compared to men, women tend to be more concerned about health, nourishment, and the environment (Ureña et al., 2008).

There are many perceptions of consumers towards organic food. Being environmentally friendly and having healthier choices are the most perceived by consumers (Patnaik, 2018). Other than that, consumers also agree that organic food has no harmful effects and is superior in quality. However, organic food is expensive and lacks

variety or taste. Consumers think that the producers take advantage of the name 'organic' to uniquely distinguish their products. Organic food is said to be environmentally friendly, has no harmful effects and is healthier because consumers believe that it is organically grown without using any chemical pesticides and fertilisers (Hossain & Lim, 2016). Moreover, labelling and packaging and easy availability are also the conditions which act as a facilitator for consumers to purchase organic products. The availability of organic food is mostly not as frequent as conventionally produced food. Consumers usually evaluate directly based on the physical appearances of products such as their taste, smell, and size (Agyekum et al., 2015). In addition, certification of organic food plays a crucial role for consumers to choose their food. A study conducted by Shafie et al. (2021) found that noncertified organic vegetables (self-claimed organic status) contain a higher microbial count of coliform and *S. aureus* in comparison to certified organic vegetables (national organic certification). It is also worth mentioning that the same study finds that organic vegetables contain non-considerable levels of *E. coli* and many vegetables had an unacceptable level of *S. aureus*. For example, for pesticide residue, there is a significant difference between organic and conventional kale, whereas for the mustard and spinach, there is no significant difference between the two different types of farming (Mohd Hisham et al., 2021). Organic and conventional fruits study by Ismail et al. (2021) find that kiwi, apple, and plum have significant differences in zinc concentration. Nevertheless, all fruits are within the permissible limits in terms of heavy metals.

In every decision made by consumers in terms of choosing the type of food they are purchasing either organic or conventional produce, there must be several factors that influence them in making the decision (Thambiah et al., 2015; Sangkumchaliang & Huang, 2012; Dardak et al., 2009). Basha et al. (2015) state that the reasons consumers purchase organic foods are different and may include concerns for the environment, health and lifestyle, food product quality, and their subjective norms. However, based on a survey conducted by Hossain and Lim (2016), knowledge, perceived beliefs and attitudes, government support and policy, and availability have positive relationships with consumer behaviour while health consciousness, environmental concern, and price have no positive relationship with consumer behaviour. In addition, according to Paul and Rana (2017), there are several factors influencing the attitude towards organic food

among consumers other than health consciousness and environmental concerns which are quality and safety, willingness to pay, price and certification, fashion trends and unique lifestyles, and social consciousness.

3.0 Methodology

3.1 Questionnaire Development

The questionnaire used in this study was adapted from previous studies by Patnaik (2018) and Mehra and Ratna (2014). The ethics approval had been obtained for the study (Ref number: REC/07/2020(UG/MR/170)). The questionnaire comprised 29 items divided into two sections. Section A consisted of questions on the respondent's demographic profiles, while section B consisted of questions regarding consumer perception towards organic food. Respondent's demographic data surveyed in the questionnaire were gender, educational level, marital status, employment status, and monthly income. In section B (Part 1), questions number 1 to 4 were designed to measure respondent's knowledge and awareness of organic food. Whereas in section B (Part 2), 17 questions measured respondent's perception of organic food based on five factors, including product information, labelling and packaging, promotion, price, and accessibility of organic food. A five-point Likert scale was used to measure the variables in this section. The response options ranged from strongly agree (5) to strongly disagree (1) for each variable. A pilot study was conducted among college students to determine the reliability and validity of the questionnaire. The internal consistency reliability by Cronbach's alpha of this assessment was 0.704 indicating an acceptable level of reliability.

3.2 Sample Size & Survey

Shah Alam is the capital city district of Selangor. The sample size for the study was determined based on Daniel (1990). According to the Shah Alam City Council (MBSA), as of 2020, there were 650 000 population in Shah Alam. The sample size for this study was calculated based on the following formula:

$$S = \frac{N Z^2 P (1-P)}{d^2 (N-1) + X^2 P (1-P)} \quad (1)$$

Where:

S = Required sample size

N = Population size

Z = Z statistic for a level of confidence value (1.96 for 95% confidence level)

P = Expected proportion (assumed to be 0.5), and

d = Precision (in proportion of one)

$$S = \frac{(650\ 000) (1.96)^2 (0.5) (0.5)}{(0.05)^2 (649\ 999) + (1.96)^2 (0.5)}$$

$$S = 381.17$$

$$S = 420 \text{ (oversample by 10\%)}$$

Based on the calculation, a total of 381 samples were required for this study. However, an additional 10 per cent of the total samples were added to impede any potential missing values, bringing to a total sample size of 420. Convenience sampling methods were applied in this study. The questionnaire was distributed to customers who visited the two most frequented grocery departmental stores in Shah Alam with their organic food lines. The participants were randomly picked (excluding those below 18 years old) using the nonprobability sampling method due to its straightforward, rapid, and cost-effective approach. All participants gave their consent and were surveyed using a printed copy of the questionnaire or via an online form. A total of 427 respondents responded to the survey. However, seven answered questionnaires were incomplete and were therefore excluded from the study.

3.3 Statistical Analysis

The analysis method used was descriptive statistics (frequencies, cross-tabulations) and nonparametric tests (Mann Whitney and Kruskal Wallis). The level of significance was set at $\alpha = 0.05$ for all tests. Mann Whitney test was applied to determine the difference in consumers' perception of organic foods between gender, whereas the Kruskal Wallis was conducted to determine the differences in consumers' perception of other demographic variables (education level, employment status, marital status, and income levels). All statistical analyses were conducted using IBM SPSS version 24.0.

4.0 Findings

4.1 Respondents' Demographic Profile

The total questionnaires analysed in this study were 420 samples after excluding the incomplete questionnaires. The demographic profiles of the respondents are shown in Table 1. In general, 77 per cent of the respondents involved in this study were female. Respondents were well educated as 90 per cent of them were college or university graduates. The majority of the respondents were single and unemployed (93 % and 85 %, respectively). Observations and additional communication with the respondents indicated that they were primarily fresh college/university graduates as the departmental stores were located nearby tertiary education institutions.

Table 1 : Respondents' Demographic Profile (n=420)

Variable		N	%
Gender	Male	96	22
	Female	324	77
Education level	Primary school	0	0
	Secondary school	11	3
	Certificate	23	5
	Graduate	376	90
	Post-graduate	10	2
Marital status	Single	391	93
	Married	29	7
Working status	Employed	63	15
	Unemployed	357	85
Monthly income	<RM3860 (B40)	392	93
	RM3860-RM8319 (M40)	20	5
	>RM8319 (T20)	8	2

4.2 Consumer Knowledge and Perceptions of Organic Products

Respondents' understanding of organic food facilitates their purchase of organic food. In this study, respondents were asked about the terms used in organic food and their source of information. Table 2 depicts consumer knowledge and understanding of organic food.

Table 2 : Consumers' Knowledge and Source of Information on Organic Food

Knowledge On Organic Foods	n	%
What do you understand by the term 'organic foods'?		
They are free from preservatives, additives, colouring, or flavouring	174	41
They contain fewer pesticides	23	5
They are grown with manure (organic fertilisers)	80	19
They are not genetically modified	33	8
They are healthy/nutritious foods	93	22
Others (all of the above, some of it etc.)	17	4
What was your source of information about organic food?		
Mass media (TV, radio)	44	10
Newspapers, magazines, etc.	217	52
Social media (Facebook, Twitter, Instagram etc.)	34	8
School/college	84	20
At a promotional/educational event	22	5
Others	19	5

Most of the respondents were aware of organic food products. Most of the respondents (41 %) knew that organic foods were free from preservatives, additives, colouring, and flavouring. This may be due to the high awareness and concerns by the respondents on the adverse effects of chemical residues from nonorganic food products. The least chosen answer was 'organic food is not genetically modified' with 8 per cent. Respondents also chose 'others' as their answer for this question in which some of them stated that they agreed with all the answer options stated in the question.

Respondents were also asked about their source of information about organic food. About 52 per cent of the respondents received information about organic food from newspapers, magazines, and books, followed by 20 per cent of the respondents who gained the information during school or college, 10 per cent via mass media, 8 per cent through social media, 5 per cent from promotional or educational events and from others (e.g., family and friends). These results also indicate that the spread of knowledge about organic foods via social and mass media needs to be increased as it has been globally accepted that social media is the current best marketing tool to reach out to potential customers and promote awareness of certain products (Mehra & Ratna, 2014).

The factors that influence consumers in buying organic food vary. Factors that lead the respondents to consider purchasing organic food products are shown in Table 3.

Table 3 : Consumers' Perceptions of Organic Food

Perceptions Toward Organic Food	n	%
What makes you want to buy organic food?		
Health consciousness (cancer care, diabetic patient etc.)	250	60
Care for environment	47	11
Status/Lifestyle/Trend	64	15
Advertising	14	3
Sales promotion/Offer	10	2
Easily available	23	5
Authentic labelling & packaging	7	2
Not interested to purchase organic food	5	1

Only 1 per cent of the respondents was not interested to purchase organic food products. Public concern about health maintenance or health improvement was identified as the main reason for buying organic foods in this study. More than half of the respondents (60 %) agreed that health consciousness was one of the reasons why they chose to purchase organic food. This shows that consumers believe that organic foods are a healthier option compared to conventional food products as they are free from preservatives, additives, colouring, and flavouring. Organically grown food is considered safer and provides greater health benefits for consumers than a conventional food product. A total of 15 per cent of respondents indicated that purchasing organic food was considered as the indicator of their high status and they have adopted a new trend in their lifestyles. Meanwhile, 11 per cent of the respondents chose to buy organic foods as they felt that they could contribute to conserving the environment. Factors such as sales promotion/offer and authentic labelling and packaging were the least favourable factors that drove the respondents to purchase organic food products (2 %). In this study, respondents were also asked about the duration that they had been consuming organic food. Results showed that 35 per cent of the respondents had been consuming organic food for more than a year. Only 10 per cent had been consuming it for about six to twelve months whereas 28 per cent reported having been consuming organic food for less than six

months. A total of 26 per cent of respondents claimed that they had never consumed organic food before.

4.3 The Relationship Between a Demographic Characteristic and Consumer Perceptions of Organic Food

A research model by Branca (2008) demonstrates that behaviours are directly described by affective, cognitive, and demographic variables. Demographic variables could influence consumer behaviour through intervening affective and cognitive variables. In this study, demographic profiles such as gender, monthly income, level of education, working status, and marital status were used to identify the relationship between demographic profiles and consumer perceptions.

4.3.1 Gender

The influence of gender on factors in the study was analysed using Mann Whitney test. Table 4 depicts the variables that are significant at $p < 0.05$ and $Z < -1.96$. There were three factors that were influenced by gender: product, labelling and packaging, and price. Each of the factors only had one variable that was significantly influenced by gender. The variable 'organic foods are environmentally friendly' which under the product factor had significant differences at the p-value of 0.009, while assured labelling and high cost were 0.029 and 0.016, respectively. Females were more likely to eat organic food, which does not contain artificial additives or preservatives in their diet, as reported by 85 per cent of the female respondents who agreed that organic food was environmentally friendly. Results also showed that females had more positive perceptions of product characteristics, labelling, and packaging. Based on research by Ureña et al. (2008), both genders have different points of view and priorities regarding food and health. The preference was based on their current attitudes, beliefs, and lifestyles. Females tend to purchase healthier food products compared to males, while males prefer more food's intrinsic pleasure. In contrast to female consumers, male consumers do not mind the higher price of food products. Generally, females are willing to pay lower prices than males for food purchasing. This is also clearly shown by our findings that found 78 per cent of the female respondents agreed that organic food was costly compared to male respondents with 36 per cent.

Table 4 : Gender

Factors	Mann Whitney U	Wilcoxon W	Z	Asym. sig. (two-tail) p	Respondents agreeing to the statement			
					Male		Female	
					N	%	N	%
Factor 1 - (Product)								
Organic foods are environmentally friendly	13018.50	17674.50	-2.621	.009	69	71	276	85
Factor 3 - (Labelling & Packaging)								
I consume foods that have assured labelling	13797.00	18453.00	-2.190	.029	63	65	242	74
Factor 4 - (Price)								
Organic foods are very costly	13186.00	17842.00	-2.403	.016	61	36	253	78

4.3.2 Education

The influence of the level of education on consumers' perception of organic food was indicated using the Kruskal Wallis test. Out of the five measured factors, only three factors on purchasing organic food (product, price, and place) were significantly influenced by the level of education as shown in Table 5.

Table 5 : Education

Factors	Level of education								Kruska df	Wallis p
	Secondary school		Certificate		Graduate		Post- graduate			
	Mean	SD	Mean	SD	Mean	SD	Mean	SD		
Factor 1- (Product)										
I always choose 'pesticide-free' foods	3.55	.688	3.00	.853	3.71	.875	3.60	.843	3	.004
I avoid food containing preservatives	3.36	.674	3.04	.976	3.55	.844	3.30	.823	3	.034
I am very conscious about my health & buy product as per that	3.36	.924	3.26	.915	3.81	.791	3.60	.516	3	.008
I am very aware about food safety standards & regulations of products I consume	3.36	1.433	3.39	.783	3.90	.761	3.90	.316	3	.009
Organic foods are environmentally friendly	3.64	0.809	3.91	.848	4.27	.747	4.20	.422	3	.012

Factors	Level of education								df	Kruska l Wallis p
	Secondary school		Certificate		Graduate		Post-graduate			
	Mean	SD	Mean	SD	Mean	SD	Mean	SD		
Factor 4 - (Price)										
Organic foods are very costly	3.45	1.293	3.30	1.222	4.10	.863	3.90	.568	3	.003
I am willing to pay more for organic product	2.36	.924	3.83	.937	3.56	.910	3.70	.675	3	.000
Factor 5 - (Place)										
I buy products that are easily available in stores	4.00	.894	3.61	.891	4.22	.731	4.40	.516	3	.004
I give an extra effort to search for the products which are really eco-friendly or healthier	2.82	.982	3.17	.887	3.55	.979	4.30	.675	3	.001

The analysis showed that consumers who pursued higher-level education (diploma, bachelor's degree, master's degree, and PhD) had a strong preference for purchasing organic food in terms of product characteristics, price, and accessibility. They chose 'pesticide-free' food and avoid food containing preservatives. Health consciousness among consumers of higher-level education also showed a positive influence on purchasing organic food. They tended to choose 'pesticide-free' and no preservative food products as they were more concerned with their health. Moreover, they were also aware of food safety standards and regulations before consuming food. Organic food was also perceived as environmentally friendly by those who pursued their education, with a mean of 4.27 for graduate consumers and a mean of 4.20 for post-graduate consumers. High school and certificate graduates were less likely to purchase organic food because they considered it costly. Oddly, although certificate graduates considered organic food costly, they were willing to pay more for organic food.

Moreover, the analysis also shows that most respondents buy products that are easily available in stores. As for post-graduate consumers, they did not mind giving extra effort to search for eco-friendly and healthier products. Consumers with a lower level of education were not willing to give extra effort to search for the products which were eco-friendly or healthier. This corresponded to the previous study by Sangkumchaliang and Huang (2012) who reported that consumers with a lower level of education were least likely to have

heard of organic agriculture; thus, they had no intention to look up a food product that is eco-friendly and healthier.

4.3.3 Marital Status

The relationship between marital status and consumer perception of organic food was analysed at a significant p-value < 0.05 using the Kruskal Wallis test. Table 6 depicts the factors that show a positive relationship between marital status and consumer perceptions: product, promotion, and price. Four variables under the product factor showed a significant influence of marital status on consumers' perception of organic food. Meanwhile, other factors such as promotion and price only had one variable showing a positive relationship between marital status and consumer perceptions.

Table 6 : Marital Status

Factors	Marital status				df	Kruskal Wallis p
	Single		Married			
	Mean	SD	Mean	SD		
Factor 1 - (Product)						
I always choose 'pesticide-free' foods	3.70	.884	3.24	.739	1	.004
I am very aware about food safety standards & regulations of products I consume	3.90	.758	3.28	.960	1	.000
Branded food gives me the quality assurance	3.60	.888	3.31	.604	1	.040
Organic foods are better than conventional food products	3.96	.804	3.21	.902	1	.000
Factor 3 - (Promotion)						
I usually search on the Internet for customer feedback, if any.	3.69	.962	4.21	.861	1	.005
Factor 4 - (Price)						
I am willing to pay more for organic product	3.53	.913	2.90	1.081	1	.002

Single consumers were more likely to purchase organic food that they believed was pesticide-free and had better trust in branded foods as they gave them quality assurance. They also had more preferences for organic food than conventional food and were aware of food safety standards and regulations. In a previous study conducted by Dardak et al. (2009), it was reported that no significant differences were found between married and single consumers' perceptions of purchasing and consuming organic food. In this study, single consumers had a strong preference for organic compared to married

consumers which did not support the perception research by Dimitri (2012) who reported that the probability for single consumers to buy organic foods was lower. More than half of the respondents of this study were between 21 and 25 years old and mostly single. Married consumers were most likely to search on the Internet for customer feedback regarding organic food before purchasing. The analysis in Table 8 indicates that consumers who were not married were willing to pay more for organic food products than married consumers who probably had more expenses and financial responsibilities in their household.

4.3.4 Employment status

Employment significantly influences the attitude of consumers towards organic food. Eight variables seemed to be influenced by employment status. Each of the variables was significant at $p < 0.05$. Among the two employment groups examined, three factors were statistically significant: product, promotion, and price, as shown in Table 7.

Table 7 : Employment Status

Factors	Employment status				df	Kruskal Wallis p
	Employed		Unemployed			
	Mean	SD	Mean	SD		
Factor 1 - (Product)						
I always choose 'pesticide-free' foods	3.35	.823	3.72	.880	1	.002
I avoid food containing preservatives	3.30	.775	3.55	.862	1	.028
I am very conscious about my health & buy product as per that	3.52	.737	3.80	.812	1	.005
I am very aware about food safety standards & regulations of products I consume	3.37	.848	3.94	.745	1	.000
Organic foods are environmentally friendly	4.08	.679	4.25	.768	1	.003
Factor 3 - (Promotion)						
I usually search on the Internet for customer feedback, if any.	4.29	.812	3.63	.956	1	.000
Factor 4 - (Price)						
Organic foods are very costly	4.27	.807	3.99	.926	1	.027
I am willing to pay more for organic product	3.11	.986	3.55	.915	1	.003

Both employed and unemployed consumers showed a relatively positive attitude towards organic food. They often chose 'pesticide-free'

and no preservatives food but there was no significant difference between mean values which were less than 0.5. They were also concerned about their health and bought their food based on their health status and agreed that organic food was environmentally friendly. Interestingly, unemployed consumers were more aware of food safety standards and regulations of products, though they were less likely to search on the Internet for customer feedback on organic food. However, in terms of the price factor, both groups perceived organic food as costly but were still willing to pay more when purchasing it.

There is no specific study that indicates the employment influence on organic food. However, in a study by Mehra and Ratna (2014), students and self-employed are most likely to have a strong preference for organic food as they are both health-conscious and keen on consuming food that is good value for money.

4.3.5 Monthly income

The monthly income was categorised into three different income classifications in Malaysia: the B40 (bottom 40 %), M40 (middle 40 %) and T20 (top 20 %). Of the factors identified, only three variables were found to be significant at a p-value < 0.05. These factors are presented in Table 8.

Table 8 : Monthly Income

Factors	Monthly income						df	Kruskal Wallis p
	<RM3860 (B40)		RM3860- RM8319 (M40)		>RM8319 (T20)			
	Mean	SD	Mean	SD	Mean	SD		
Factor 1 - (Product)								
I am very conscious about my health & buy product as per that	3.77	.802	3.30	.733	4.38	.744	2	.005
Factor 3 - (Promotion)								
I usually search on the Internet for customer feedback, if any.	3.69	.967	4.30	.657	4.00	1.069	2	.015
Factor 4 - (Price)								
Organic foods are very costly	4.00	.920	4.60	.681	4.13	.641	2	.010

The consumers' monthly income influenced consumer perceptions of three factors - product, promotion, and price. Consumers with a monthly income of RM8,319 and above (T20) were very concerned about their health and bought products according to

their health status with a mean of 4.38. Consumers in the middle-income group (M40) perceived organic food as costly. Meanwhile, consumers with income below RM3,860 (B40), were less likely to purchase organic food and were less likely to search on the Internet for customer feedback. According to Dimitri (2012), both variables which are income and education variables are closely related. The study found that the higher the education, the higher the income. Those who are in higher-income groups have a high preference to consume organic food products as they may have more disposable income to allow for more freedom to try organic food products (Quah and Tan, 2009).

4.4 Recommendations

Malaysia aspires to modernise, innovate, and sustainably improve its agricultural practices. The Ministry of Agriculture and Agro-based Industry has tasked the Department of Agriculture Malaysia (DOA) with developing an organic accreditation scheme known as the Malaysian Organic (myOrganic) certification. In future studies, additional variables could be added to increase the accuracy and effectiveness of the study findings. The additional variables may comprise of taste and freshness of products, the innovativeness, and the way organic food is presented to consumers. There is also minimal access to the literature regarding consumer perception of organic food in Malaysia.

5.0 Conclusion

The study indicates that demographic profiles such as gender, marital status, employment status, monthly income, and the level of education may influence several variables of consumers' behaviour in purchasing organic food. Employment status and the level of education have a greater influence among all the demographic profiles. Consumers with a higher level of education and higher income are more likely to purchase organic food. Moreover, female consumers are keen to purchase organic food as they care about their health and diet. Most of the respondents understand that organic food is foods that are free from preservatives, additives, colouring, and flavouring. There is also various understanding of the term organic food such as it is not genetically modified, has fewer pesticides, grown with manure and is healthy food. There may be some limitations in this study where the

questionnaire was distributed at shopping malls in a busy area with many distractions. It may not be comfortable for the respondents to answer the questionnaire. Online surveys could be an option, especially now that people have better access to smart devices and the Internet and because available software has recently become more user-friendly.

Acknowledgements

The authors would like to thank the participants of the study for their kind support and feedback.

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